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Application No. 03 255 704.3 - 2102	Ref. HP/FP6179634	Date 14.05.2004
Applicant NGK INSULATORS, LTD.		

Communication pursuant to Article 96(2) EPC

The examination of the above-identified application has revealed that it does not meet the requirements of the European Patent Convention for the reasons enclosed herewith. If the deficiencies indicated are not rectified the application may be refused pursuant to Article 97(1) EPC.

You are invited to file your observations and insofar as the deficiencies are such as to be rectifiable, to correct the indicated deficiencies within a period

of 4 months

from the notification of this communication, this period being computed in accordance with Rules 78(2) and 83(2) and (4) EPC.

One set of amendments to the description, claims and drawings is to be filed within the said period on separate sheets (Rule 36(1) EPC).

Failure to comply with this invitation in due time will result in the application being deemed to be withdrawn (Article 96(3) EPC).



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MARSITZKY D  
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Enclosure(s): 2 pages/ reasons (Form 2906)

Jul-22-2004 03:03pm

From-BURR AND BROWN

315 233 8320

T-459 P.004/005 F-451



Beschluß/Protokoll (Anlage)	Communication/Minutes (Annex)	Notification/Procès-verbal (Annexe)
Datum Date Date	Blatt Sheet Folio	Anmelde-Nr.: Application No.: Demande n°:
14.05.2004	1	03 255 704.3

The examination is being carried out on the following application documents:

**Text for the Contracting States:**

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC NL PT RO SE SI SK TR LI

**Description, pages:**

1-17 as originally filed

**Claims, No.:**

1-9 as originally filed

The following documents (D1-D5) are referred to in this communication; the numbering will be adhered to in the rest of the procedure:

- D1: US-A-4 232 185 (HIGUCHI NOBORU ET AL) 4 November 1980 (1980-11-04)
- D2: US-A-4 112 193 (HIGUCHI NOBORU ET AL) 5 September 1978 (1978-09-05)
- D3: US-A-3 658 583 (OGAWA YUTAKA ET AL) 25 April 1972 (1972-04-25)
- D4: EP-A-0 981 154 (COLOROBBIA ESPANA SA) 23 February 2000 (2000-02-23)
- D5: US-A-3 888 796 (NIGOL OLAF) 10 June 1975 (1975-06-10)

**1. Article 84 EPC:**

- 1.1 The definition of the compositional proportions of the semiconductive glaze in claim 1 is unclear since only two ranges are given for three compounds (?); another clarity issue: the figures of the ranges are not related to amounts of material like e.g. mol, mol-%, g, wt-%, or pbw. In addition the amount of silica and alumina is not given. This should be clarified.
- 1.2 The formulation "obviously, numerous modifications and variations..." on p. 17 should be erased to render the scope of protection sought for clear.

Jul-22-2004 09:03pm

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14.05.2004	2		

## 2. Article 54 EPC:

- 2.1 The semiconductive glaze compositions of D1-D3 do not include flux compounds, whereas the compositions of D4-D5 include such flux compounds but vary in the glaze composition compared to the present application. Thus, the subject matter of claims 1-9 is considered to be novel.

## 3. Article 56 EPC:

The document D1 discloses (see table 1) a semiconductive glaze composition comprising a) base glaze with KNaO-MgO-CaO-Al<sub>2</sub>O<sub>3</sub>-SiO<sub>2</sub> and b) tin oxide and antimony oxide as conductivity imparting oxides for use as insulator coating. D1 is therefore considered to represent the closest prior art (similar arguments can be started from D2 and D3). The difference of the present application compared to D1 is the use of a flux to enhance the melting characteristics of the composition. The objective technical problem may therefore be formulated as to provide alternative semiconducting glaze compositions. Since the use of fluxes in semiconductive glaze compositions is well known in the state of the art (see also the cited passages of D4-D5), the subject matter of claim 1 is not considered to be inventive.